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| 09/716,843      | 11/17/2000  | Kouichi Ikeda        | A-382WOC            | 8226             |

802 7590 06/27/2003

DELLETT AND WALTERS  
310 S.W. FOURTH AVENUE  
SUITE 1101  
PORTLAND, OR 97204

EXAMINER

KEBEDE, BROOK

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2823

DATE MAILED: 06/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/716,843

Applicant(s)

IKEDA ET AL.

Examiner

Brook Kebede

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 April 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 5,6,8 and 9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5,6,8 and 9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 5, 6, 8 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 recites the limitation “wherein said plurality of semiconductor chips are divided into first groups made of four pieces **if four pieces are determined to be possible to form a group as a result of said step of carrying out a quality test, but wherein said chips are divided into second groups made of two pieces if four pieces are determined to be not possible to form a group as a result of said step of carrying out a quality test but if two pieces are determined to be possible, and wherein said chips are divided into third groups made of one piece if neither four pieces nor two pieces are determined to be possible to form a group as a result of said step of carrying out a quality test but if one piece is determined to be possible as a result of said quality test**” in lines 11-23.

However the recited claimed limitation lacks clarity in its meaning and scope because it is not clearly since applicant use an “**if**” statement the result “**then**” is missing as result of execution the task. In addition, the limitation “**to be possible**” also lacks clarity because it is not

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certain whether the determination is made to choose the selection of division of the chips.

Therefore, the recited claim limitation is indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8 recites the limitation “wherein said plurality of semiconductor chips are divided into first groups made of four pieces if four pieces are determined to be possible to form a group as a result of said step of carrying out a quality test, but wherein said chips are divided into second groups made of two pieces if four pieces are determined to be not possible to form a group as a result of said step of carrying out a quality test but if two pieces are determined to be possible, and wherein said chips are divided into third groups made of one piece if neither four pieces nor two pieces are determined to be possible to form a group as a result of said step of carrying out a quality test but if one piece is determined to be possible, after said quality test is carried out” in lines 15-27.

However the recited claimed limitation lacks clarity in its meaning and scope because it is not clearly since applicant use an “if” statement the result “then” is missing as result of execution the task. In addition, the limitation “**to be possible**” also lacks clarity because it is not sure whether the determination is made to choose the selection of division of the chips.

Therefore, the recited claim limitation is indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

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international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 5, 6, 8, and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by

Cockerill et al. (US/5,786,237).

Re claim 5, Cockerill et al. disclose a method for manufacturing the semiconductor device, comprising: a step forming a plurality of identical semiconductor chips on a semiconductor wafer (see Fig. 1); a step of carrying out a quality test for each of a plurality of said semiconductor chips formed on said semiconductor wafer (see Fig. 6); and a step of dividing one or a plurality pieces of said semiconductor chips on the basis of a result of said quality test, wherein said plurality of semiconductor chips are divided into first groups made of four pieces if four pieces are determined to be possible to form a group as a result of said step of carrying out a quality test, but wherein said chips are divided into second groups made of two pieces if four pieces are determined to be not possible to form a group as a result of said step of carrying out a quality test but if two pieces are determined to be possible, and wherein said chips are divided into third groups made of one piece if neither four pieces nor two pieces are determined to be possible to form a group as a result of said step of carrying out a quality test but if one piece is determined to be possible as a result of said quality test (see Figs. 1-7; Col. 3, line 21 – Col. 4, line 62).

Re claim 6, as applied to claim 5 above, Cockerill et al. disclose all the claimed limitations including the limitation wherein said semiconductor chips are memory chips (see Figs. 1-7; Col. 3, line 21 – Col. 4, line 62).

Re claim 8, Cockerill et al. disclose a method for manufacturing the semiconductor device, comprising: a step forming a plurality of identical semiconductor chips on a semiconductor

wafer (see Fig. 1); a step of carrying out a quality test for each of a plurality of said semiconductor chips formed on said semiconductor wafer; a step of carrying out wiring, resin sealing and terminal formation on the semiconductor chips formed on the semiconductor wafer (see Fig. 6); and a step of dividing one or a plurality pieces of said semiconductor chips on the basis of a result of said quality test, wherein said plurality of semiconductor chips are divided into first groups made of four pieces if four pieces are determined to be possible to form a group as a result of said step of carrying out a quality test, but wherein said chips are divided into second groups made of two pieces if four pieces are determined to be not possible to form a group as a result of said step of carrying out a quality test but if two pieces are determined to be possible, and wherein said chips are divided into third groups made of one piece if neither four pieces nor two pieces are determined to be possible to form a group as a result of said step of carrying out a quality test but if one piece is determined to be possible, after said quality test is carried out (see Figs. 1-7; Col. 3, line 21 – Col. 4, line 62).

Re claim 9, as applied to claim 8 above, Cockerill et al. disclose all the claimed limitations including the limitation wherein said semiconductor chips are memory chips (see Figs. 1-7; Col. 3, line 21 – Col. 4, line 62).

***Response to Arguments***

6. Applicants' arguments filed on April 7, 2003 have been fully considered but they are not persuasive.

With regard the IDS, applicants are need to submit a new PTO-1449 for Examiner to consider it, since the previous PTO-1449 has been crossed-out.

With regard art rejection of claims 5, 6, 8, and 9, applicants argued that "While the Cockerill et al. document does mention dividing into 1x4 or 1x3 or 1x2 or 1x1, it does not specifically states that it would make the division as a result of the testing as does applicant ..."

In response to the applicants' argument, the Examiner respectfully submits that such an argument is not commensurate with the scope of the claims, in particularly, as stated above. The examiner respectfully submits that Cockerill et al. disclose all the claimed limitations as applied herein above. While applicants are admitting that Cockerill et al. disclose dividing of the chips into 1x4 or 1x3 or 1x2 or 1x1, applicants are denying the testing process that leads to the division of the chips into 1x4 or 1x3 or 1x2 or 1x1. The Examiner respectfully submits that Cockerill et al. disclose testing the chip and determining of the dicing (dividing) pattern as result of the test (see Fig. 6).

Therefore, the rejection of claims 5, 6, 8 and 9 under 35 U.S.C. 102 is deemed proper.

#### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


*Correspondence*

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brook Kebede whose telephone number is (703) 306-4511. The examiner can normally be reached on 8-5 Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Olik Chaudhuri can be reached on (703) 306-2794. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Brook Kebede

  
June 24, 2003



**W. David Coleman**  
**Primary Examiner**  
**Tech Center 2800**